

**TYPES OF SAWFLIES DESCRIBED IN THE GENUS *PONTANIA* A. COSTA
(HYMENOPTERA: TENTHREDINIDAE) IN THE ILLINOIS
NATURAL HISTORY SURVEY**

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Abstract.—The types of ten sawfly species described in the genus *Pontania* by MacGillivray and Ross are examined. This study has resulted in the following taxonomic changes: *Pontania daedala* MacGillivray is a **new synonym** of *Pontania proxima* (Serville); *Pontania demissa* MacGillivray is a **new synonym** of *Eupontania gracilis* (Marlatt); *Pontania devincta* MacGillivray is a **new synonym** of *Pontania populi* (Marlatt); *Phyllocolpa dedecora* (MacGillivray), **n. comb.**; *Phyllocolpa derosa* (MacGillivray), **n. comb.**; and *Nematus dotata* (MacGillivray), **n. comb.** Notes are given on the types and hosts where known.

Key Words: galls, leaf rolls, *Phyllocolpa*, *Eitelius*, *Nematus*

This study of ten sawfly types described in the genus *Pontania* A. Costa deposited in the Illinois Natural History Survey, Champaign, Illinois (INHS) focuses on some that were reared by Yuasa and treated by Yuasa (1922) in his work on sawfly larvae and concurrently or later described by MacGillivray (1921, 1923); two species described by Ross (1929) are also included. Placement of these species by Smith (1979) was based on the generic concepts of that time. Study of these specimens is preliminary to further work on eastern North American gall-forming sawflies and an updated catalog of Nearctic gall-forming sawflies of the genera *Euura* Newman, *Pontania* A. Costa, *Eupontania* Zinovjev, and *Phyllocolpa* Benson. Generic concepts have changed since Smith (1979) and the gall-forming sawflies of North America are poorly known. As a result of extensive

work on the Palearctic and world fauna by Zinovjev (1993) and Zinovjev and Vikberg (in press), the types of Nearctic species need to be reexamined and incorporated into the current classification.

We give some notes on each species, illustrate the types, and attempt to associate the MacGillivray species with species treated in Yuasa (1922). We propose three new synonymies and three new combinations. The other four species have been treated correctly in previous literature. Species headings are in the original combinations.

SPECIES DESCRIBED BY MACGILLIVRAY

MacGillivray (1921) described 19 species of Nematinae, including seven species of *Pontania* "as a result of an extended series of collecting and breeding of sawfly larvae by Dr. H. Yuasa at Ithaca, New York, and by the Maine Agricultural Experiment

Station at Orono, Maine." The larvae of all these species were supposed to be described by Yuasa (1922). We examined part of Yuasa's collection from Maine (Orono) which is deposited in the National Museum of Natural History, Smithsonian Institution (USNM). It consists of a set of vials with larvae or remnants of leaves with galls kept in alcohol.

MacGillivray (1923) described 22 sawfly species in a paper on sawflies collected from "the Katmai Expedition to Alaska." Only one of them was described under the genus *Pontania* and currently (after Benson 1960) it is treated as a synonym of *Phyllocolpa excavata* (Marlatt 1896) (= *megacephala* Rohwer 1908; *dstricta* MacGillivray 1923; *apicifrons* Malaise 1932; *carinifrons* Benson 1940) (Benson 1960, Smith 1979).

Pontania daedala MacGillivray 1921: 33
(Figs. 1, 10, 18)

Type locality.—Ithaca, New York.

Lectotype.—Designated by Frison (1927), female, "7-6"; "cocoon; Ithaca N. Y. 21 Aug. 11 [or 17?]"; "Type of female *Pontania daedala* A.D. MacGillivray [red label]"; "INHS TYPE #1592."

Valid name.—*Pontania proxima* (Serville 1823) (= *P. daedala* MacGillivray), **n. syn.**

Notes.—The species was reared by Yuasa (1922), and he described the larvae of *P. proxima* (as *Pontania hyalina* Norton) from the material numbered Y-7-1, -7-4-1, -8.8, Cu-cu 201, and M-92. The remnants of host-plant leaves in the vial (M-92) deposited in the USNM cannot be identified to species, but the sawfly is undoubtedly *P. proxima*. We did not find the number "7-6" in Yuasa (1922).

The female holotype has asymmetric mandibles; ovipositor (sawsheath + oblong plate) as long as the hindtibia (Fig. 10); short cercus, about half the length of the sheath; antennal hollow glabrous and shining with only few hairs on the lower part (Fig. 18), on the upper part the border be-

tween the inner orbit and antennal hollow convex and shining; and supraclypeal area glabrous. This combination of characters places it in the *proxima* group. MacGillivray mentioned the black color of the pronotum which may separate this species from *P. hyalina* Norton (a synonym of *P. proxima*), but in the holotype, the margins of the pronotum are pale, exactly as in specimens of *P. proxima* from Europe.

Pontania decrepita MacGillivray 1921: 33
(Fig. 11)

Type locality.—Ithaca, New York.

Holotype female.—"Ithaca, N. Y. 21 July '17; 35-2-5"; "Type of female *Pontania decrepita* A.D. MacGillivray [red label]"; "INHS TYPE #1594."

Valid name.—*Eitelius gregarius* (Marlatt 1896) (= *Pontania decrepita* MacGillivray). Synonymy by Ross (1951).

Note.—This species (under the name *Micronematus gregarius* Marlatt) was treated by Yuasa (1922) as being collected by himself ("Y"), but without mentioning its rearing number, and he did not mention the name *Pontania decrepita* MacGillivray. The holotype has claws of the same shape as characteristic for *Eitelius* and also the short, broad ovipositor in the holotype (Fig. 11) is typical for free-feeding Nematinae.

Pontania dedecora MacGillivray 1921: 32
(Fig. 7)

Type locality.—Ithaca, New York.

Lectotype.—Designated by Frison (1927), female, designated here; "185a2, May 24, 1919"; "Type of *Pontania dedecora* [sic!] A.D. MacGillivray, female [red label]"; "INHS TYPE # 1595."

Valid name.—*Phyllocolpa dedecora* (MacGillivray), **n. comb.**

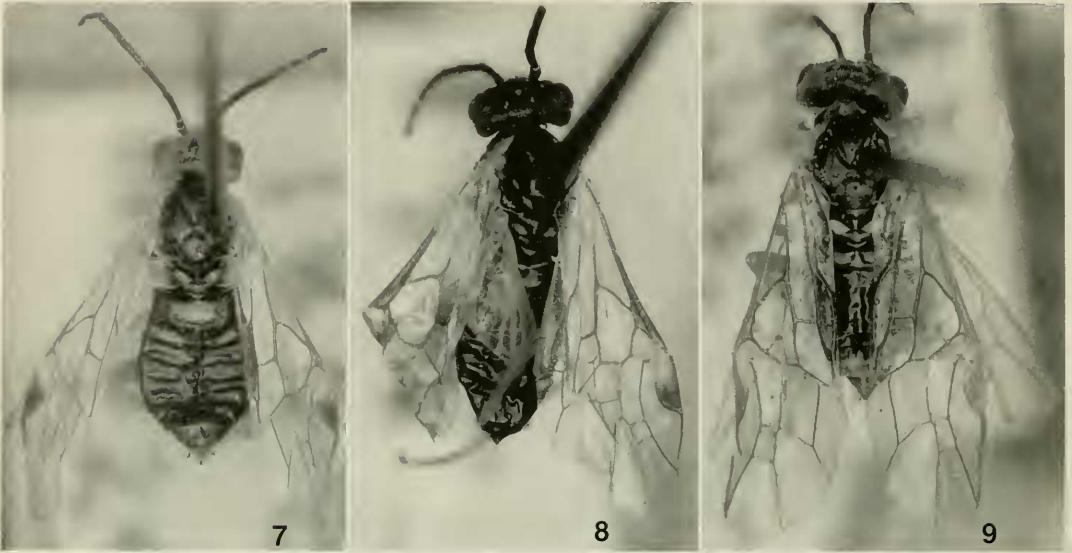
Note.—This species was described from two females ("Nos. 185a2, 8.51 (?) -1-1"). Yuasa (1922) mentions none of these numbers.



Figs. 1-3. Type specimens of *Pontania* in lateral view. 1, *P. daedala*. 2, *P. demissa*. 3, *P. devincta*.



Figs. 4-6. Type specimens of *Pontania* in lateral view. 4, *P. dotata*. 5, *P. destricta*. 6, *P. pepii*.



Figs. 7-9. Type specimens of *Pontania* dorsal view. 7, *P. dedecora*. 8, *P. derosa*. 9, *P. mariana*.

Pontania demissa MacGillivray 1921: 33
(Figs. 2, 12)

Type locality.—Ithaca, New York.

Lectotype.—Designated by Frison (1927), female, "191-1-1"; "Ithaca N. Y."; "Type of female *Pontania demissa* A.D. MacGillivray [red label]"; "INHS TYPE #1597."

Valid name.—*Eupontania gracilis* (Marlatt 1896) (= *Pontania demissa* MacGillivray), **n. syn.**

Notes.—Larvae and galls were described by Yuasa (1922) as *P. demissa* MacGillivray 1921 (Y-191-1-1). We have not seen larval material with this number.

Pontania demissa could be treated either as synonym of *Eupontania gracilis* (Marlatt 1896) or *E. petiolaridis* (Rohwer 1917). Both these species are associated with different willow species: *Salix sericea* Marsh., and *Salix petiolaris* Smith, respectively. These sawflies are very similar, and they might prove to be conspecific. Both willow species occur in the vicinity of Ithaca, and, at least in herbarium material studied by AGZ, the galls are known also from both host plants. However, *Salix sericea* seem to be more common there and galls only on this willow were found in the fall of 1997

around Ithaca by AGZ and T. Carr. The type of *Pontania demissa* fits best the type material of *E. gracilis*, and we consider them as synonymous.

Pontania derosa MacGillivray 1921: 34
(Fig. 8, 19)

Type locality.—Ithaca, New York.

Holotype.—Female, "142-1-1 May 13, 1919"; "Ithaca, N. Y."; "Type of female *Pontania derosa* A.D. MacGillivray. [red label]"; "INHS TYPE #1599."

Valid name.—*Phyllocolpa derosa* (MacGillivray), **n. comb.**

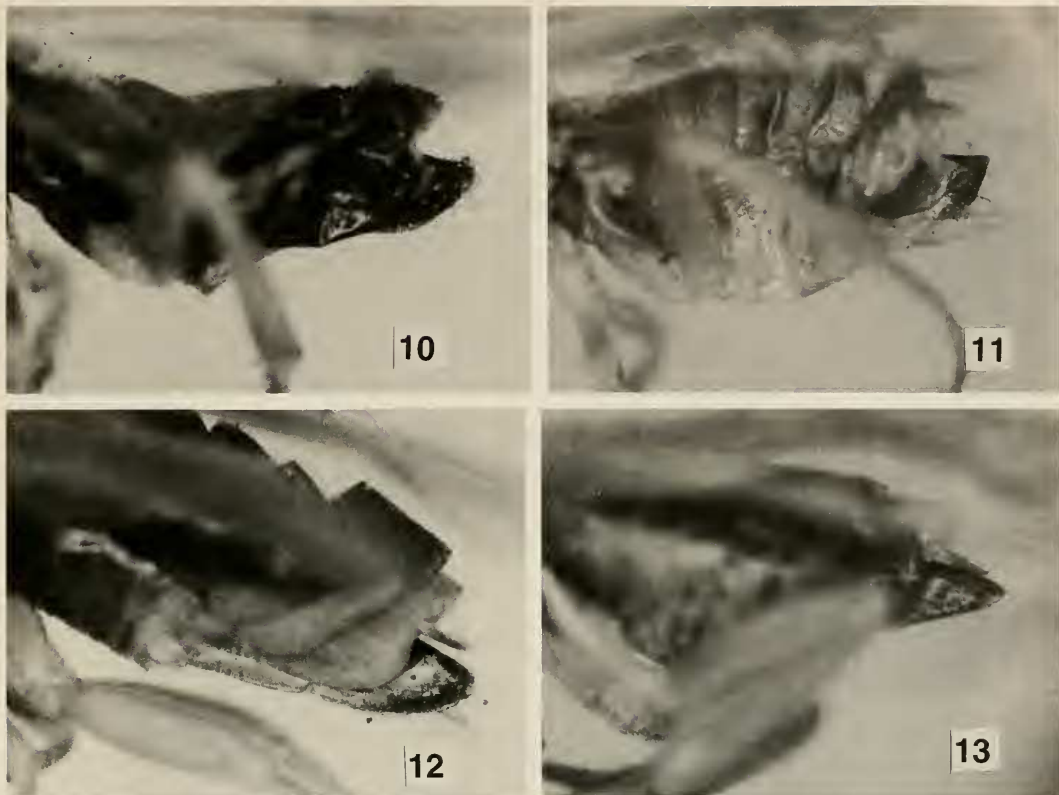
Notes.—The leaf-rolls and larvae were described by Yuasa (1922) in his key, but the host plant is unknown. The species is very similar to *Phyllocolpa nigrita* Marlatt, and these species may be conspecific.

Pontania devincta MacGillivray 1921: 34
(Figs. 3, 13)

Type locality.—Orono, Maine.

Lectotype.—Designated by Frison (1927), female: "Me. Exp. Sta. Lot. 1694 Sub. 9, 1 Aug. 13"; "Type of female *Pontania devincta* A.D. MacGillivray [red label]"; "INHS TYPE #1601."

Valid name.—*Pontania populi* Marlatt



Figs. 10-13. Apex of abdomen and sheath in lateral view of *Pontania* types. 10, *P. daedala*. 11, *P. decrepita*. 12, *P. demissa*. 13, *P. devincta*.

1896 (= *Pontania devincta* MacGillivray),
n. syn.

Notes.—MacGillivray described this species from two (or more) females, with numbers Subs. 9 and 226. Yuasa (1922) mentioned the number 226, but he did not mention 9. The galls described by Yuasa, kept in the USNM (Maine: Bangor Bay, “M-226”), belong to the gall-making *Eupontania consors* (Marlatt 1898). The plant species is *Salix humilis* Marsh. with comparatively large, glabrous leaves (which is typical of plants growing in shadowy forests). We have not seen reared specimens with Nr. 226, but according to the galls, the paralectotype with this number belongs to *Eupontania consors*. However, the lectotype belongs to the leaf-rolling species group of *Pontania* s. str. and is conspecific with *Pontania populi*, a leaf-rolling species

on *Populus grandidentata* Michx. It is conspecific also with a specimen identified as *P. devincta* by R. B. Benson (kept in The Natural History Museum, London) who (1960) incorrectly synonymized *Pontania devincta* under *P. excavata* Marlatt.

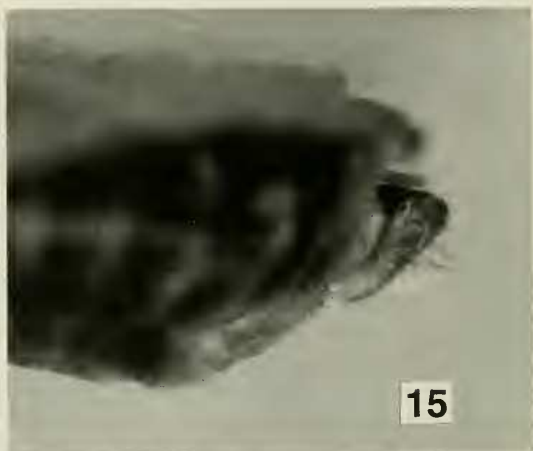
Pontania dotata MacGillivray 1921: 34
(Fig. 4)

Type locality.—Ithaca, New York.

Lectotype.—Designated by Frison (1927), male, “8-48 (?) -1-1”; “Ithaca N.Y. 25 Aug. 18”; “Type of male *Pontania dotatus* A.D. MacGillivray [red label]”; “INHS TYPE #1603.”

Valid name.—*Nematus dotatus* (MacGillivray), **n. comb.**

Note.—This species belongs to the genus *Nematus* Panzer (= *Pteronidea* Rohwer) but cannot be placed more precisely at pre-



Figs. 14-17. 14-15, Apex of abdomen and sheath in lateral view of *Pontania* types. 14, *P. destriata*. 15, *P. excavata*. 16-17, Head and thorax in lateral view of *Pontania* types. 16, *P. destriata*. 17, *P. excavata*.



Figs 18–19. Head in frontal view of *Pontania* types. 18, *P. daedala*. 19, *P. derosa*.

sent. It seems that this specimen was reared by Yuasa, but he did not mention this name or the number "8-48 (?) -1-1" in his keys. However, the larvae with a similar number (Y-8-48(?) -1) were described by Yuasa as *Pteronidea* sp. 6.

Pontania dstricta MacGillivray 1923:
168

(Figs. 5, 14, 16)

Type locality.—Alaska: Katmai

Holotype.—Female (glued on the cardboard triangular point): "Katmai Alaska June '17"; "Jas S Hine Collector"; Type of *Pontania dstricta* A.D. MacGillivray female"; "INHS TYPE #1600."

Valid name.—*Phyllocolpa excavata* (Marlatt 1896) (= *Pontania dstricta* MacGillivray). Synonymy after Benson (1960).

Note.—This species belongs to the *Phyllocolpa leucapsis* group, characterized by glabrous and shining antennal hollows and the hairs of the upper posterior part of the mesepisternum directed upwards. We are not sure that it is conspecific with *Phyllocolpa excavata* (Marlatt 1896), described from "California, Colorado" and "Veta Pass, Colo." The type of *P. dstricta* differs from that of *Phyllocolpa excavata* Marlatt 1896 (Figs. 15, 17) by a less rounded sawsheath with a distinct emargination beneath in lateral view (Figs. 14–15), by the shape of the inner orbits in lower part (Figs. 16–17), and by the darker coloration (while type of *P. excavata* is paler colored than it is typical for this species).

SPECIES DESCRIBED BY ROSS

H. H. Ross (1929) described four species in his paper revising Marlatt's "Group I" of *Pontania* (= *Phyllocolpa* Benson). Types of two of them are deposited in INHS.

Pontania mariana Ross, 1929: 91
(Fig. 9)

Type locality.—Canada, B.C., Vancouver.

Holotype.—Female, reared from leaf-

curl on *Populus balsamifera*; "Vancouver. B. C. Larva coll. IX. 4. 1927 H. H. Ross"; "emerged VI. 4. 1928"; [red label] "HOLOTYPE *Pontania mariana* Ross female"; "INHS TYPE #1606."

Valid name.—*Phyllocolpa mariana* (Ross).

Host plant.—*Populus balsamifera* L.

Additional material examined.—Female (paratype), Vancouver. B. C. Larv. Coll. IX. 4. 1928 H. H. Ross; Reared from *Populus balsamifera* leaf-curl; emerged VI. 4. 1928; [red label] Paratype No 42755; PARATYPE *Pontania mariana* H. H. Ross. Deposited in the USNM.

Pontania pepii Ross, 1929: 95
(Fig. 6)

Type locality.—Montana, Florence.

Holotype.—Female, "Mont. Exper. Station Coll. Florence Mont. June 1, 1912"; "HOLOTYPE *Pontania* female pepii Ross [red label]"; "INHS TYPE #1608."

Valid name.—*Phyllocolpa pepii* (Ross).

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